

## STATE OF WASHINGTON

## DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

October 12, 1999

Mr. Hector Rodriguez U.S. Department of Energy P.O. Box 550, MSIN: A5-15 Richland, Washington 99352

Dear Mr. Rodriguez:

Enclosed is the Notice of Deficiency (NOD) for the combined Double-Shell Tank (DST) System and the 204-AR Waste Unloading Station draft Part A, Form 3, Dangerous Waste Permit Application provided to the Washington State Department of Ecology (Ecology). It is Ecology's understanding that the two Part A, Form 3, Permits are being combined to accommodate issuance of one Operating Permit for the Dangerous Waste Management System.

This NOD is to assist the U.S. Department of Energy (USDOE) in revising this chapter to meet the requirements for a Dangerous Waste Management Facility-Operating Permit. Documentation of the resolution of issues will be placed on the administrative record in the form of correspondences and meeting minutes signed by representatives of the respective agencies.

Upon submission, the Certified Permit Application will be subject to the formal review and response process in accordance with the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) and the Hanford Facility Dangerous Waste Permit.

If you have any questions or would like to schedule a meeting regarding this letter, please feel free to contact me at (509) 736-3003.

Sincerely,

Brenda Becker-Khaleel Nuclear Waste Program

Enclosure

cc: Fred Ruck, FDH

Charles Mulkey, LMHC

Dan Parker, LMHC

Nina Menard, WMH Mary Lou Blazek, OOE

Administrative Record: Double Shell Tank System

and 204-AR Waste Unloading Station

## Double Shell Tank (DST) & 204 AR Systems Chapter 1.0, Part A, Draft Rev. 9 Ecology received draft chapter July 20, 1999

Comment	
Number	Chapter 1
1.	Complete Forms 1 and 3 as they apply to the dangerous waste management activities proposed in the draft, Part B application for a final status permit. Provide the information required by the forms and instructions. The completed Part A, Form 3 will become part of the facility's operating permit.
2.	The instructions for completing a Part A application require facility drawing(s) submitted with the Form 3 to identify the facility boundary, areas of past operation, future operations, and areas occupied by all storage, treatment, or disposal (TSD) operations used during interim status. Revise the Part A, Form 3, accordingly.
3.	Page 1: Revise the Part A to reflect the actual tank capacities and operating conditions. Specify what components of the TSD unit are counted towards the capacity determination.
4.	Page 3: The narrative description fails to address the 241-EW-151 Vent Station and the two double contained receiver tanks, 244-A and -S. Please revise text to describe the ventilation systems.
5.	Explain how the addition of the 204-AR system and removal of the 244-BX, -TX, and -U impacted the capacity of the entire system.
6.	Page 3 and 6: Clarify in which component(s) of the TSD unit is treatment (T04) to occur. Specify in process description colum of page 5 and 6.
7.	Page 3: Mention of "future unit and/or the 242-A Evaporator" is confusing. Clarify whether these components are part of the TSD system.
8.	Page 7: Delete "including constituents that have not been detected in the waste; however".
9.	Page 7: Delete "the strong possibility".
10.	Page 7: Please explain why the last sentence addressing multi-source leachate was modified.
11.	Section VII, Geographic Location, is blank although latitude and longitude data is provided on the drawings. The information must be provided using Washington State Plane Coordinates.
12.	Revise the Part A to describe the ancillary equipment of the DST and 204-AR System.
13.	Describe piping, pits, vaults, valves, and other TSD structures. Many of the pits are contaminated and several pipes have plugged or leaked. Identify which components are out of service.
14.	Portray future activities to address routine transfers, mixing and retrieval, sampling, pretreatment in tank, staging tanks for future facilities, sluicing, and control systems, etc.
15.	The Part A must address operations of TSD units for which the Part B Permit Application will be submitted. Describe all dangerous waste management operations and processes of the operating TSD.
16.	The location of the DST System, the 204-AR System, and all ancillary equipment must be presented in the Part A.
17.	Identify boundaries for the TSD unit, including equipment used in the DST and the 204-AR systems.
18.	Describe waste transfers and associated equipment.

## Double Shell Tank (DST) & 204 AR Systems Chapter 1.0, Part A, Draft Rev. 9 Ecology received draft chapter July 20, 1999

Comment Number	Chapter 1
19.	Provide tables and diagrams identifying all ancillary equipment, including underground piping.
20.	Clarify if the "secondary tanks" are equivalent to secondary containment vessels. For guidance, see WAC 173-303-040 "Tank system" and "Leak-detection system".
21.	Provide a detailed description of the comprehensive leak detection system; describing the leak detection pits in detail.
22.	Describe double encased piping. Specify if the secondary containment requirements are fulfilled in regard to compliance with the requirements of <i>Dangerous Waste Regulations</i> , WAC 173-303-640, -806; and 40 CFR 270.
23.	Clarify if "process" components are used to manage dangerous waste. Explain rational if the non-process equipment is proposed not to be considered ancillary equipment. Explain why secondary containment is not considered necessary for these components of the TSD unit.
24.	The DST and 204-AR system ancillary equipment has not been adequately addressed. Describe piping, fittings, flanges, valves, etc. that are used to control the flow of dangerous waste from its point of introduction and throughout the TSD unit.
25.	Specify if the "piping" includes the Cross-Site Transfer System.
26.	Specify if, or which, underground piping has double containment compliant with the <i>Dangerous Waste Regulations</i> , WAC 173-303-040 and 640(4).
27.	Specify if the diversion boxes, valve pits, and diverter stations are coated or otherwise constructed to detect, prevent, and retain spills.
28.	Provide diagrams of waste transfer routes. Specify the point of origin, final destination, and all facilities accessible. <i>Dangerous Waste Regulations</i> , WAC 173-303-040 and 640(4).
29.	Provide diagrams and tables of ancillary equipment for the TSD unit.
30.	Describe catch tanks and specify if the catch tanks have secondary containment compliant with the <i>Dangerous Waste Regulations</i> , WAC 173-303.
31.	Specify the number of tanks and pumps contained in the mechanical equipment room of the 204-AR system.
32.	Describe and chemically define "adjustments" to waste. Specify in which component what treatment will occur.
33.	Describe lines, vaults associated with any particular tank farm including, pits, DCRTs, vaults, leak detection pits, and equipment associated with each tank farm. Insert table(s) and/or diagram(s) to address equipment.